3M™ SelfCheck™ System
R-Series Models 8420 and 8422

Owner's Manual

Built to Exceed Expectations

3M

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Safety information

Read, understand, and follow all safety information contained in these instructions before installing and using the 3M™ SelfCheck™ System R-Series Model 8420 or 8422. Retain these instructions for future reference.

Intended use

The 3M™ SelfCheck™ System R-Series Models 8420 and 8422 are intended for use by library patrons in checking library materials in and out without assistance from library staff. These systems are intended for use in an indoor library environment, and have not been evaluated for other uses or locations.

Explanation of signal word consequences

⚠ WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
⚠ CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

Explanation of product safety label symbols

Attention: Read accompanying documentation

Risk of electric shock

BACKLIGHT CONTAINS MERCURY, DISPOSE ACCORDING TO LOCAL, STATE, AND FEDERAL LAWS

Display unit: Mercury disposal hazard

Warning

⚠ **WARNING** **To reduce the risks associated with hazardous voltage contained within the power supply, which, if not avoided, could result in death or serious injury:**

- Do not use SelfCheck™ System if a power supply case or power cord are damaged.

- Do not use SelfCheck™ System in outdoor or wet environments.

- Use approved system components installed by 3M service personnel only.

- Do not attempt to service or repair SelfCheck™ System internal circuitry or power supplies — no user serviceable parts inside — contact 3M Service for repair.

Caution

To reduce the risk associated with environmental contamination due to the incorrect disposal of the lithium battery in PC, mercury in monitor/display, and/or any circuitry that contains lead in the solder:

- At the end of service life, dispose of all components (touch-screen monitor, PC, case, reader, pad, scanner, appliance coupler, etc.) in accordance with federal, state and local requirements.

Label locations

3M™ SelfCheck™ System R-Series Model 8420 (kiosk)

This device contains
3M Model 810
intentional radiator
FCC ID: **DGFTTS810**
IC: **458A-TTS810**

The 3M™ SelfCheck™ System
may be covered by one or more of
U.S. Patents:

6,587,568	6,549,141
6,464,138	6,750,777
6,542,070	6,369,709

3M™ SelfCheck™ M8420
100-120V~ / 200-240V~   CE   ℝ 203YJN000045
3 / 1,5 A
60 / 50 Hz
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including
    interference that may cause undesired operation.
This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
N1108
c UL us LISTED I.T.E. 4P24

S/N: 8420XXXX

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St. Paul, Minnesota 55144   Made in USA   **3M**

SC_8420_label_locations

3M™ SelfCheck™ System R-Series Model 8422 (tabletop)

This device contains
3M Model 810
intentional radiator
FCC ID: DGFTTS810
IC: 458A-TTS810

The 3M™ SelfCheck™ System
may be covered by one or more of
U.S. Patents:

6,587,568	6,549,141
6,464,138	6,750,777
6,542,070	6,369,709

3M™ SelfCheck™ M8422
100-120V~ / 200-240V~ CE ℝ203YJN000045
3 / 1,5 A
60 / 50 Hz

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including
interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

N1108

S/N: 8422XXXX

3M Library Systems
St. Paul, Minnesota 55144   Made in USA   **3M**

SC_8422_Label_locations

Regulatory compliance

FCC Radio Frequency Rules and Regulations

This equipment has been tested and found to comply with the limits for a Class A device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can emit radiated radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NO MODIFICATIONS. Modifications to this device shall not be made without the written consent of 3M Company. Unauthorized modifications may void the authority granted under Federal Communications Commission and Industry Canada rules permitting the operation of this device.

FCC intentional radiator certification

Model 8420 – Model 8422 — FCC ID: DGFTTS810

This equipment contains an intentional radiator approved by the FCC under the FCC ID number shown above. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada radio frequency rules and regulations

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numerique de la classe A est conforme a la norme NMB-003 du Canada.

Industry Canada Radio Equipment Certification

Model 8420 – Model 8422 — IC: 458A-TTS810

EMC compliance Europe

This equipment complies with the requirements of the EMC and R&TTE directives.

Australia

This unit complies with the EMC requirements for Australia.

Japan

同梱の電源コードは当該製品専用です。

Introduction

Key attributes

3M™ SelfCheck™ System R-Series Models 8420 (kiosk) and 8422 (tabletop) enable library customers to easily check out and check in materials. Key features include the following:

- Ease of use, enabling many customers to achieve self-service usage rates up to 100%

- Patron assurance that items are checked in/out correctly

- Ability to read barcodes and 3M™ RFID tags

- Real-time e-mail notification if the circulation system goes offline or the printer is out of paper

- Check-in/checkout rate monitoring

- Troubleshooting and statistics access from virtually any location

- Integration with 3M™ Command Center

- Optional integrated pedestal with locking cabinet space available for Model 8422 (tabletop)
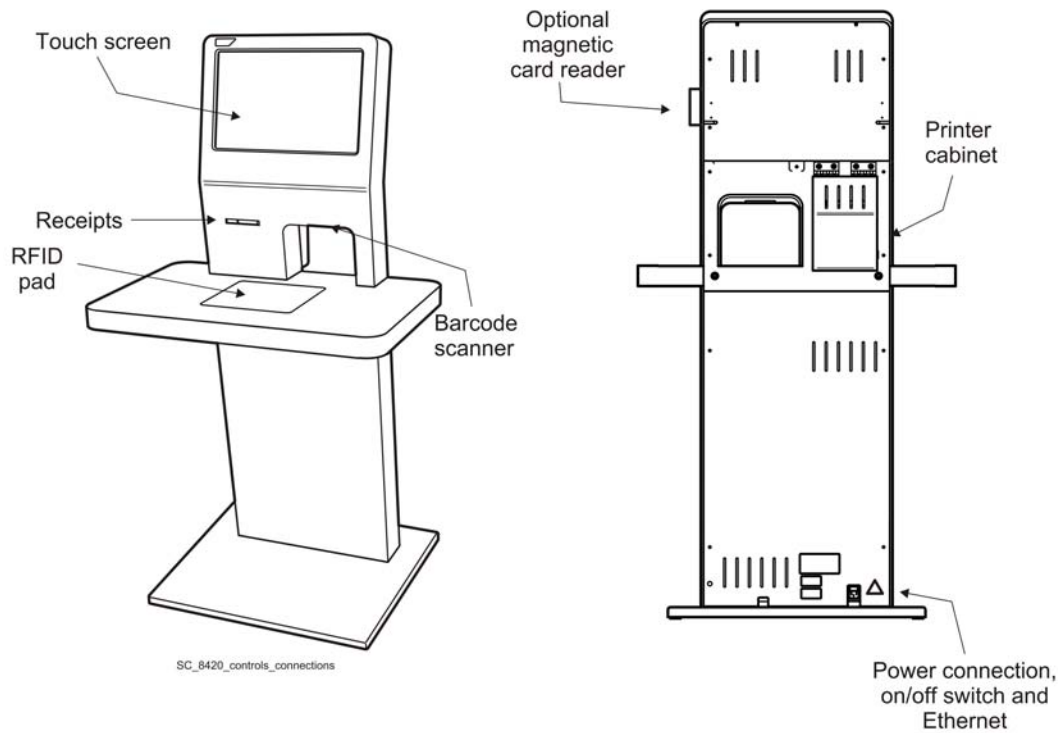
Kiosk Model 8420

Tabletop Model 8422
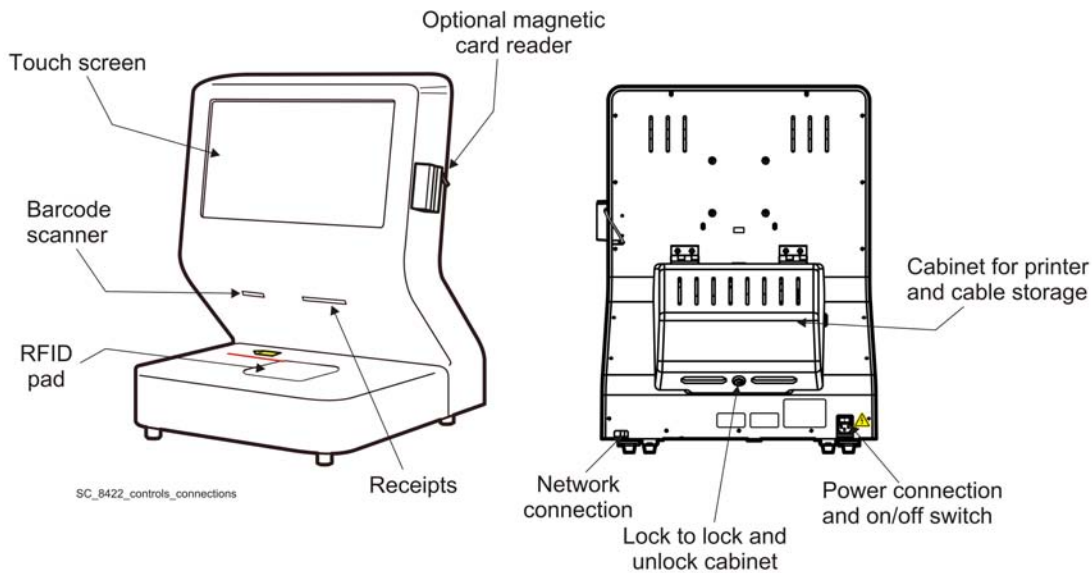
SelfCheck system controls and connections

8420 controls and connections

SC_8420_controls_connections

Touch screen
Receipts
RFID pad
Barcode scanner
Optional magnetic card reader
Printer cabinet
Power connection, on/off switch and Ethernet

8422 controls and connections

SC_8422_controls_connections

Touch screen
Barcode scanner
RFID pad
Receipts
Optional magnetic card reader
Cabinet for printer and cable storage
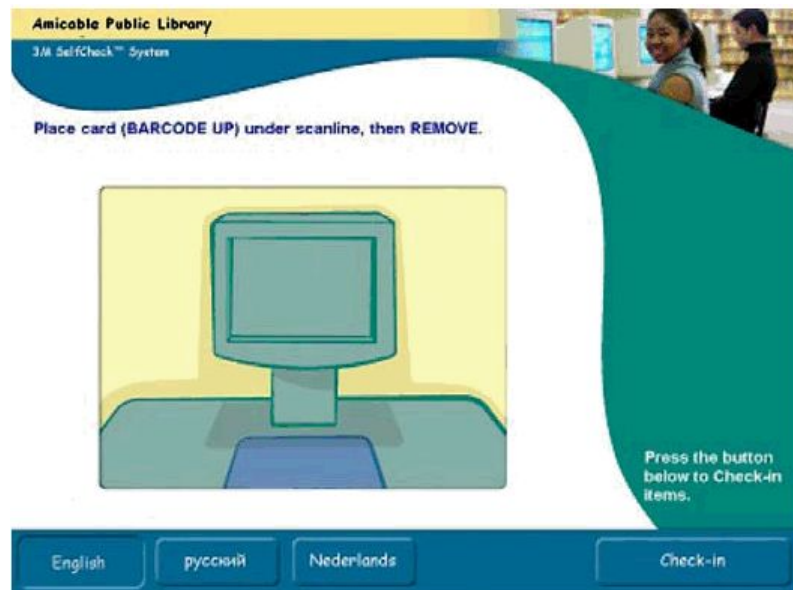Network connection
Lock to lock and unlock cabinet
Power connection and on/off switch

System software

The 3M™ SelfCheck™ System R-Series Models 8420 (kiosk) and 8422 (tabletop) are shipped with 3M™ SelfCheck™ System software already installed.

Introducing the system to library staff and patrons

The introduction of a self-service system fundamentally changes material flow within a library, so 3M strongly recommends that your entire staff should be involved during the preparation phase. Although the system is designed for intuitive use, your staff should be prepared to assist library patrons during system introduction.

3M recommends using this manual for periodic training sessions with library staff since it contains safety information, machine specifications, commonly used procedures, and other information useful during day-to-day operations. Also, please make this manual accessible when the system is in use so it can serve as a reference guide during operation.
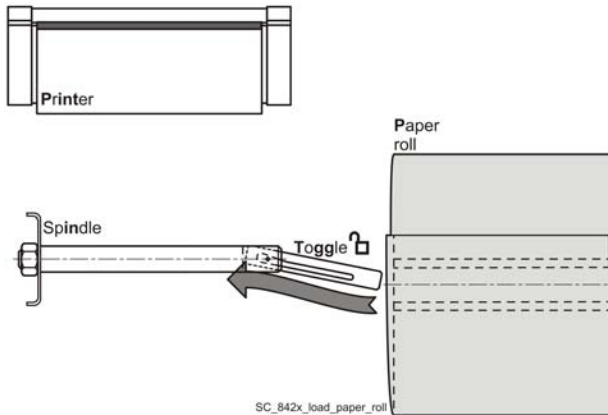
Operations

Turn the system on and off

Use the power switch to turn the SelfCheck system on. For information on shutting the system down and on restarting the software, see the *SelfCheck Manager User Guide*, which is included on the user documentation CD.

Load printer paper

Use the following procedure to load a new roll of paper in the printer.

1. Open the printer access cover at the rear of the SelfCheck using the key. The 3M™ Dual Lock™ anchors will secure the cover open.

2. Swing the paper retainer toggle to the unlocked position and, if present, remove the used paper spool and any paper remnants in the printer.

3. With the paper roll positioned to unroll toward the printer as shown, slide the new paper roll over the toggle and onto the spool, then swing the toggle into the locked position as shown.
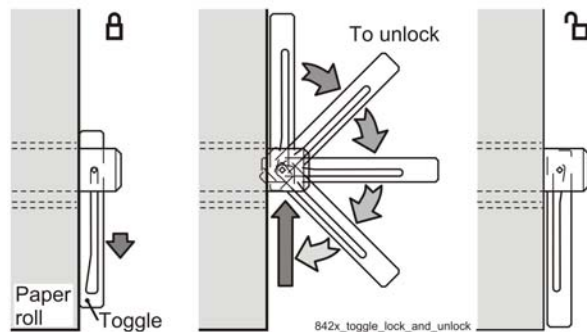

4. With printer power on, feed the paper end into the slot near the top of the printer. The printer will automatically load, align, and cut the paper.
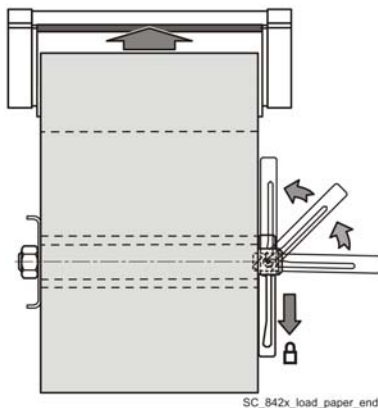
Open cover to access printer and paper roll spindle
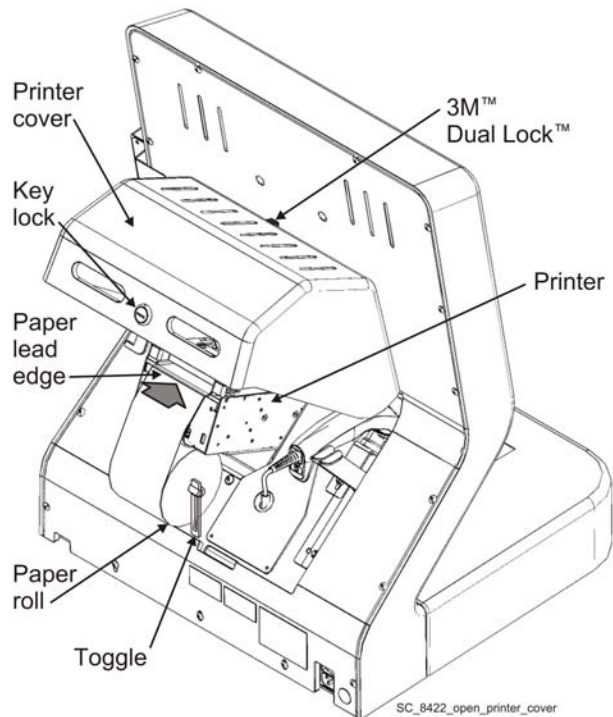
Toggle operation: locking and unlocking

Note the slot shape and orientation in the locked and unlocked positions. **The toggle must be snug against the paper roll (no gap) in the locked position for proper printer operation.**

Clean system components

Use the information in this section for system and component cleaning.

CAUTION

- Always turn OFF system power before cleaning.

- Do NOT use any abrasive cleaners on system enclosure surfaces.

Instructions

- Clean the system by gently using a soft cloth dampened with water or a mild cleaning solution.

- Clean the monitor by using pre-moistened towelettes that are sold specifically for monitor cleaning. If these are not available, use a non-solvent based cleaner to dampen a soft cloth.

- Clean the barcode scanner window regularly by wiping the scanner window with a clean, dry, cotton-tip swab or cotton cloth.

- Clean paper dust from the printer with a compressed air duster.

Adjust the touch screen monitor

Touch screen monitor display characteristics are preset at the factory. Do not attempt to change monitor settings — no user serviceable parts inside the system enclosure — contact 3M Service for repair.

If you wish to make adjustments, use only the **Display Properties** adjustments available in Windows.

Note: Changing the touch screen display resolution is not recommended, since the default resolution of 1280 by 1024 is optimized for the system graphics.

Adjust audio volume

Use the **Volume** icon in the Windows® taskbar to adjust the system volume level, which requires the use of the mouse or touch screen.

Troubleshooting

RFID tag reading problems

Symptom	Solution
System doesn't read tags	• Make sure the item is tagged with 3M RFID tags. • Make sure the tag is not blank or disabled by trying a tag known to be good. • Make sure you are placing the tag within the read range of the RFID pad by placing the tag in the middle of the pad.
System doesn't read a particular tag type	The tag type may not be configured. Call 3M service.
Pad read range reduced to less than 6 in [15 cm]	Make sure the pad is at least 2 in. [5 cm] from metal.

Barcode scanner problems

• If the scanner has a poor read rate, check for dust and fingerprints on the scanner window and clean if necessary with a clean, dry cotton-tip swab or cloth.

• If the scanner can't read a particular barcode symbology, add the new symbology. See the scanner documentation for information.

Specifications

Dimensions

See the *3M™ SelfCheck™ System R-Series Model 8420 and 8422 Site Planning Guide* for physical dimensions.

Electrical requirements

The SelfCheck™ System requires compliance with the following electrical specifications:

- An outlet within 9.8 feet (3 m) of the system. This is the length of the power cable, which means this is a cable-run specification.

- Electrical service of 100 to 120 VAC, 3.0 A, 50/60 Hz, single phase or 200 to 240 VAC, 1.5 A, 50/60 Hz, single phase.

Environmental requirements

Place the SelfCheck™ System in a location that meets the following environmental requirements:

Humidity	0% to 85% RH, non-condensing
Operating Temperature	50° F to 93° F (10° C to 34° C)
Storage Temperature	–22° F to 131° F (–30° C to 55° C)

Network requirements

The 3M™ SelfCheck™ System comes with an integrated network adapter and communicates with the ILS over an Ethernet network, which requires the following network infrastructure:

- The standard wired Ethernet adapter requires support for 10BASE-T or 100BASE-T protocols and RJ-45 cable termination.

- The optional wireless Ethernet adapter requires support for 802.11 g or 802.11 b protocols and must meet the requirements listed in the following table:

Security	Network security is the library's responsibility. Security measures include but are not limited to the following: • Separation from the library's public wireless network. • SSID transmission suppression so that the access point is not readily visible or likely to be used by library patrons. • Either WPA or WEP encryption, with encryption key rotation and/or MAC address filtering. • If financial transactions using credit or debit cards are implemented, the library must conform to Payment Card Industry (PCI) data security standards (DSS) developed by the PCI Standards Council. Requirements can be found at `http://www.pcisecuritystandards.org/`.
Signal Strength	The SelfCheck™ System must be located within optimal operational range of the wireless access point, as determined by access point signal strength, which can be analyzed and measured using software installed with the wireless network adapter. • Transmitted signal strength from the wireless access point must be greater than –27dBm as measured at the installed location of the SelfCheck System. • Software RSSI (received signal strength indicator) must show greater than 90% signal strength (all five bars of RSSI are green) at the installed location of the SelfCheck System.
Guidelines	The following can help ensure required signal strength at the SelfCheck location: • Install the SelfCheck™ System within twenty feet (20 ft. [6 m]) of the wireless access point. • Install the SelfCheck™ System in line-of-sight of the wireless access point, with little or no metal between the two. This will reduce radio-frequency interference or multi-path distortion effects.

Ordering supplies

Refer to the following information when ordering paper for the printer.

Description	Printer paper, thermal contrast coating (one side)
3M P/N	78-8126-7827-0
Width	3.15 inches [80 mm]
Roll outside diameter	4.0 inches [100 mm] **Maximum**
Core inside diameter	0.43 - 0.50 inches [11.1 - 13.0 mm]
Length	410 ft. [125 m] per roll (approximate), 24 rolls per carton

Warranty

Effective 12-12-05

One Year Library Systems Product Performance Guarantee: Subject to the Limitation of Liability below, 3M guarantees your satisfaction with the performance of any 3M Library System Product for 12 months from the date of installation provided that a) you are the original purchaser: b) you have executed a one (1) year 3M Service Agreement for maintenance of the Library System product; and c) the product has not been subjected to abuse, misuse, accident or neglect. Performance means the product meets 3M published product specifications. If you are not completely satisfied with the performance of your Library System Product, you may return the Library System product for a prompt refund. 3M will pay all reasonable de-installation and shipping charges to return the product to 3M. Note that all claims under this guarantee must be submitted to 3M within 12 months from the date of installation of the 3M Library Systems Product. Failure to submit a claim within this time frame will invalidate this guarantee. IMPORTANT: Consumables and non-3M branded products are excluded from this Guarantee.

Warranty and Limited Remedy for Non-Software Library Systems Products Not Covered by Performance Guarantee: Unless stated otherwise in 3M product literature or packaging, 3M warrants that each 3M Library Systems Product meets the applicable specifications for a period of ninety (90) days from the date of shipment (or, in the case of hardware installed by 3M, from the date of installation). Any warranties related to 3M software are contained in separate 3M software licenses. Consumables and non-3M branded products are excluded from this Warranty and Limited Remedy.

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Limitation of Liability: **EXCEPT WHERE PROHIBITED BY LAW, 3M AND SELLER WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM 3M LIBRARY SYSTEMs, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL, REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING WARRANTY, CONTRACT, NEGLIGENCE OR STRICT LIABILITY.**

Guarantee and Warranty Claims: For guarantee and warranty claims, and for service, contact our service representatives at 1-800-328-0067

Track and Trace Solutions   **Ver121205**
3M Center Building 225-4N-14
St. Paul, MN 55144-1000

3M Service

Information to gather

Before you call for service, please have following information available:

• The name, address, and telephone number of your facility

• A description of the problem or the issue you want addressed

• The model number and serial number of the equipment (located on the serial label), if the call is in regard to a system problem

Model Number _____

Serial Number _____

3M Service phone numbers

For questions regarding your system, call one of the following numbers.

In the United States	In Canada	In other countries
1-800-328-0067	English 1-800-268-6235 Français 1-800-567-3193	Call your local 3M office.

3M Library Systems Web Site

The 3M Library Systems Web site can be located at http://www.3M.com/library.

For additional information in the United States about 3M Library Systems, go to http://www.3M.com/us/library.